## PATENT ABSTRACTS OF JAPAN

(11)Publication number: 2004-010639 (43) Date of publication of application: 15.01.2004

(51)Int.Cl.

C09C 3/10 B01J 2/00 7/00 CO8L101:00

(21)Application number : 2002-162100

(71)Applicant: KAO CORP

(22)Date of filing:

03.06.2002

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### (54) COMPOSITE POWDER

### (57)Abstract:

PROBLEM TO BE SOLVED: To provide composite powder exhibiting optical characteristics possessed by a fluorine polymer while maintaining characteristics of powder such as an ultralow content of aggregates and a good particle feeling and to provide a method for producing the powder.

SOLUTION: The composite powder comprises composite particles in which the fluorine polymer is present on the surfaces of particles constituting the powder. The composite powder has 0.01-500 µm average particle diameter. The content of the composite particles having a particle diameter of ≥10 times that of the particles in the powder is ≤10%. The method for producing the composite powder comprises bringing the powder into contact with the fluorine polymer in the presence of a supercritical fluid in a container, then making the resultant mixture of the powder with the fluorine polymer and the supercritical fluid present under a pressure below the critical pressure of the supercritical fluid and thereby compositing the powder with the fluorine polymer.

### **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's

decision of rejection]
[Date of extinction of right]

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(11) Publication number:

2004-010639

(43) Date of publication of application: 15.01.2004

(51) Int. C1.

C09C 3/10

B01J 2/00

B01J 3/00

B01J 19/00

C08J 3/12

CO9C 3/06

// A61K 7/00

C08L101:00

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List of IDS

RE: US Patent Application Serial No. 10/586,512 for International Patent Application No. PCT/JP2005/001049 "A Method for Producing Fine Particles Using Method of Rapid Expansion into Poor Solvent from Supercritical Fluid" JAPAN SCIENCE AND TECHNOLOGY AGENCY Your Ref: NANJP0105US Our Ref: P2-06K16090-1

- p2 Japanese Laid-Open Patent Publication No. 8-104830 and its English abstract
- (2) p2 Japanese Laid-Open Patent Publication No. 8-113652 and its English abstract
- (3) p2 Japanese Laid-Open Patent Publication No. 11-197494 and its English abstract
- (4) p3 "Review of High Pressure Science and Technology", Kunio Nagahama and Liu, Guo-Tang, 1996, vol. 5, No. 1, pp. 50-56
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- (6) p3 Meziani M. J. et al., J. Phys. Chem. B, 2002, vol. 106, No. 43, pp. 11178-11182
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- (8) p4 Young T. J. et al., Biotechnol. Prog., 2000, vol. 16, No. 3, pp. 402-407
- (9) Japanese Laid-Open Patent Publication No. 2004-10639\* and its English abstract
- \* Please note that Japanese Laid-Open Patent Publication (9) has already been sent to you with our letter of May 31, 2006.